

United States Air Force Warfare Center

Testing - Tactics - Training

Team Nellis Mission & Compatible Development Brief



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Commander
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28 April 2009**

**This Briefing is:
UNCLASSIFIED**



Overview

- **Team Nellis**
 - **Culture of Excellence**
 - **What We Bring to Nevada**
 - **Global War on Terrorism**
 - **Nevada Test and Training Range**
 - **What We Need**
 - **Strategy/Pressures**
 - **Renewable Energy**
 - **Points of Contact**
 - **Summary/Key Messages**
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We are...



The Nevada Test and Training Range

Nellis Air Force Base

Creech Air Force Base (432 WG)

The Tonopah Test Range

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Team Nellis



MISSION: Deliver precise logistical, medical, security and base operating solutions that power, sustain and enhance an integrated Team Nellis approach to equip, train and provide combat forces worldwide.



MISSION: Prepare today for tomorrow's victories by providing the Combat Air Forces unsurpassed combat forces, training, tactics and equipment ...while showcasing airpower to the world



MISSION: Provide, sustain, and improve a relevant, instrumented, and integrated battlespace for full-spectrum air combat training, testing, tactics development, and innovation for US and allied forces



Team Nellis



MISSION: The 432 WG oversees operations of the 432d Operations Group, 432d Maintenance Group, 11th Reconnaissance Squadron, 15th Reconnaissance Squadron, 17th Reconnaissance Squadron, 30th Attack Squadron, 42th Attack Squadron, 432d Aircraft Maintenance Squadron and the 432d Operations Support Squadron.



MISSION: Warriors dedicated to building, sustaining and protecting the world's most respected air and space force through innovation, testing, evaluation and development of advanced weapons, tactics and electronic warfare



MISSION: Improve and standardize air and space combat capability through training and exercise of C2 warriors, testing and experimentation of their systems and processes, and documentation of their processes

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Major Tenant Units



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Culture of Excellence

- **Showcase for the Air Force and Air Combat Command**
 - “AS GOES NELLIS...SO GOES THE AIR FORCE”
- **USAFWC Vision**
 - **Benchmark**
...by which all others measure
 - **Expertise**
...which all others seek
 - **Standards**
...to which all others aspire



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What We Bring to Nevada

- 33,800 military/civilian/families
- 27,500 Retirees & Veterans
- 1,200 visitors per day
- 5,400 estimated jobs created
- \$2.5B for contracts

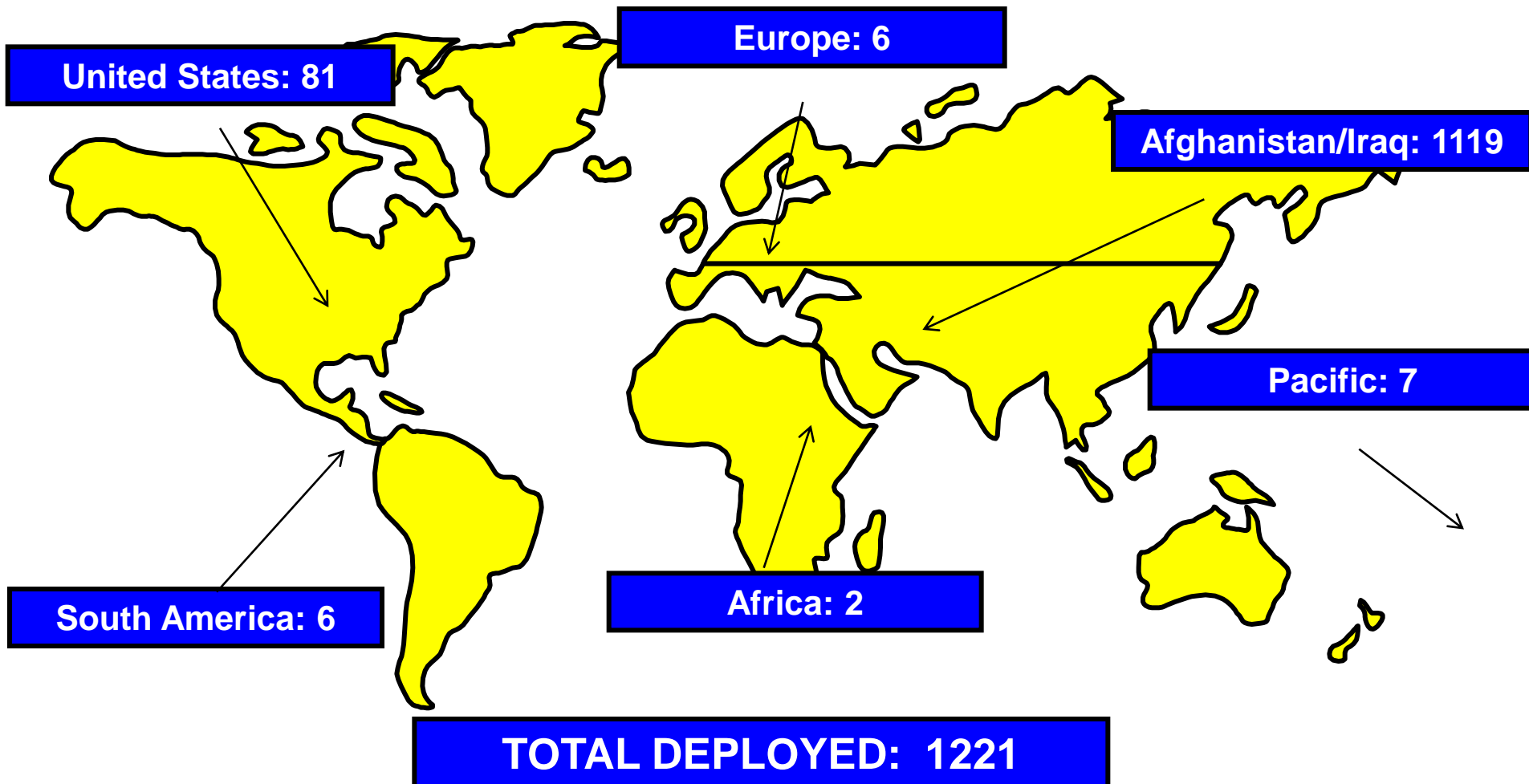


\$5.1 B Economic Impact in 2008

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The Joint Fight: Nellis/Creech Contributions





Global Events

Nellis personnel key to Iraq and Afghanistan's operations

- Combat Rescue
 - Unmanned Aerial Vehicles
 - Convoy Operations
 - Security Operations
 - Our training makes them the “best” in the World
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- Nellis Airmen creating success in the AOR

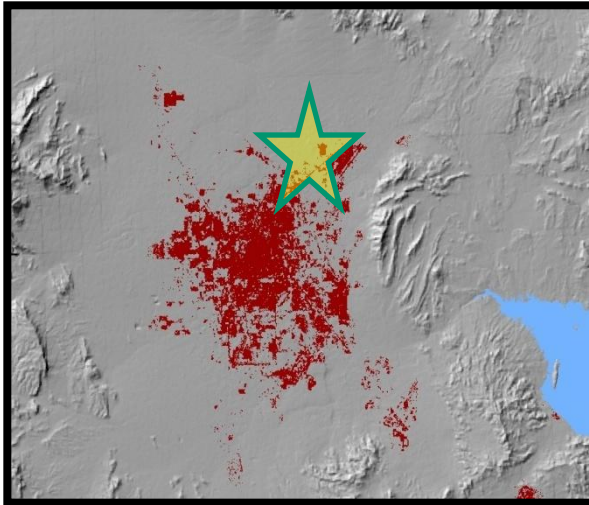


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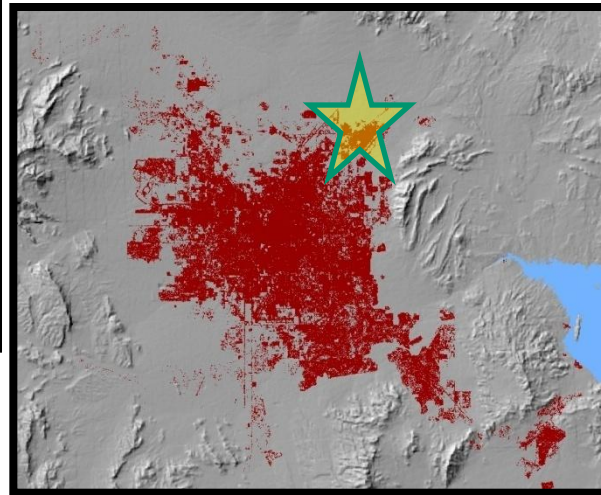


Growth in Las Vegas

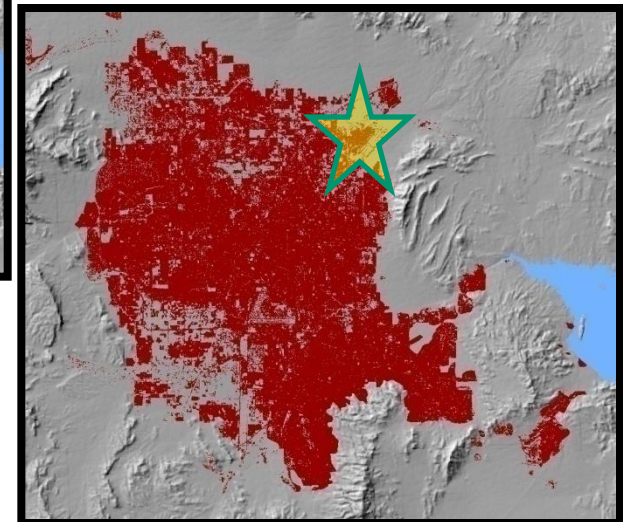
Las Vegas Valley Growth



1975



1991

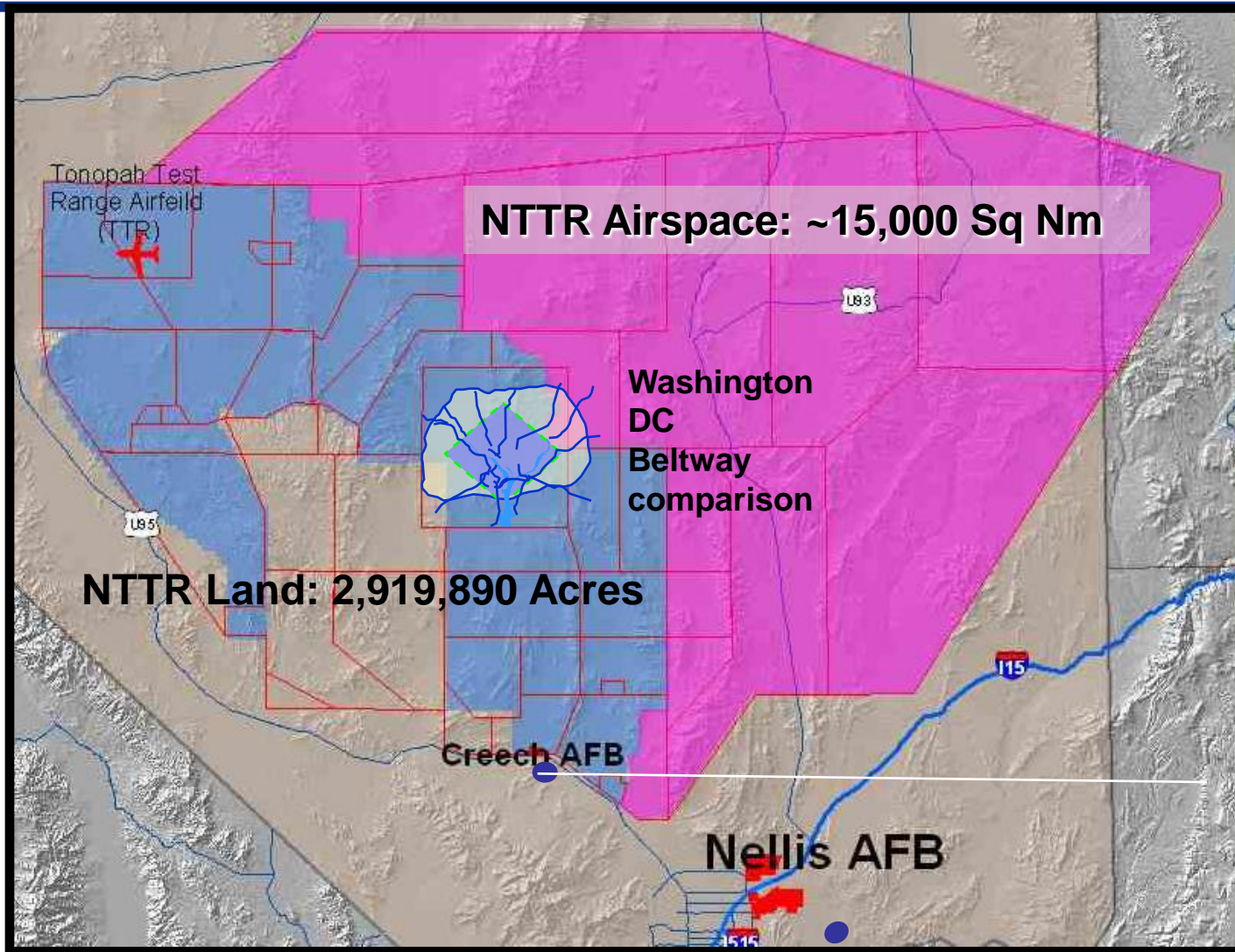


2008

- Incompatible growth may adversely impact military operations
- There is room for everyone—notification and disclosure are keys



NV Test and Training Range

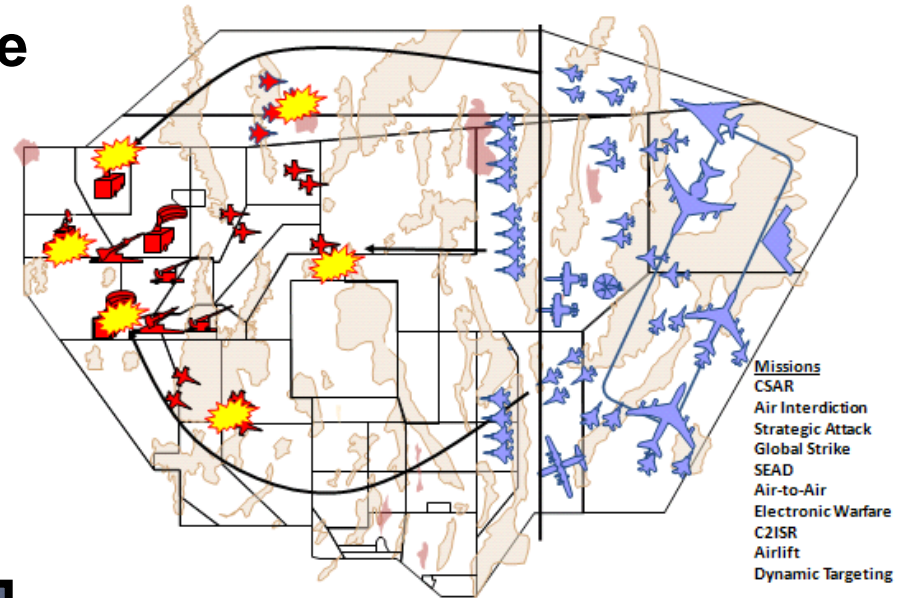


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Nevada Test & Training Range

- **Unique/Unmatched Battlespace**
 - More than 40,000 sorties/year
 - 1,900+ Targets
 - Telemetry / Data Recording
 - Playback / Scoring
 - Simulate any enemy system



A NATIONAL TREASURE

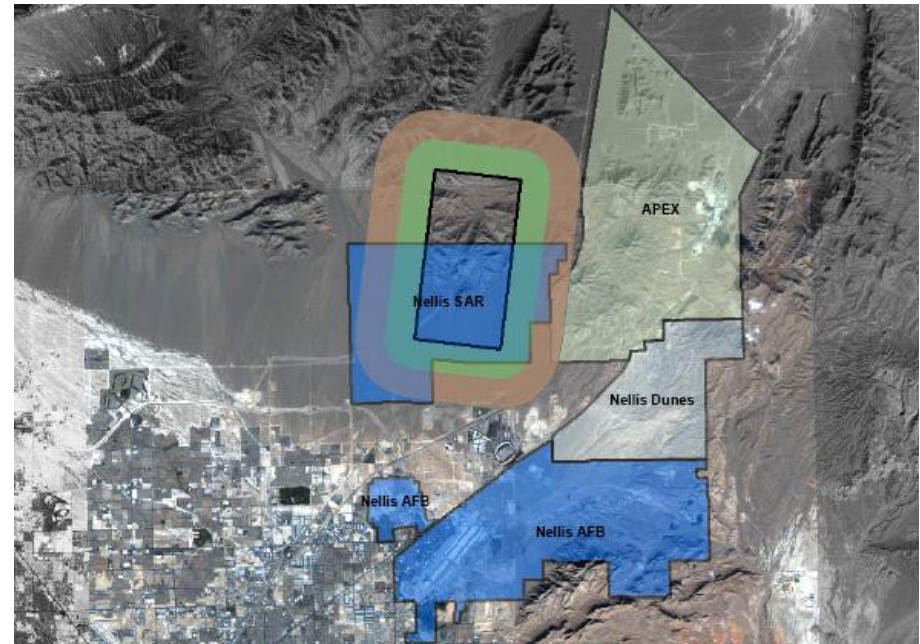
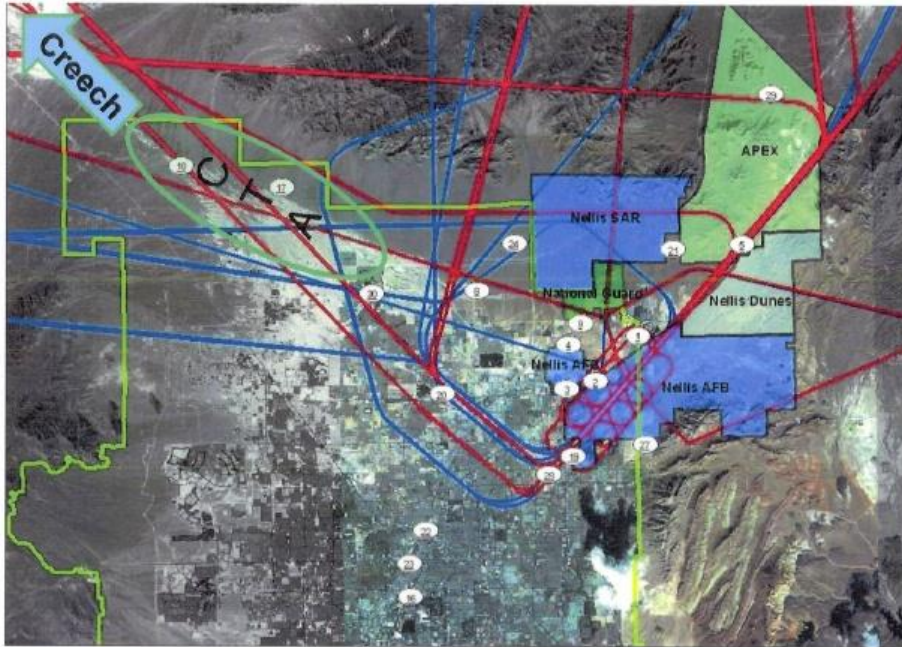
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What We Need

- Ability to safely take off/land at Nellis/Creech/Tonopah
- Unobstructed routes to/from NTTR airspace/ranges
- Ability to safely utilize invaluable NTTR airspace/ranges
- Means to safely complete critical ground training

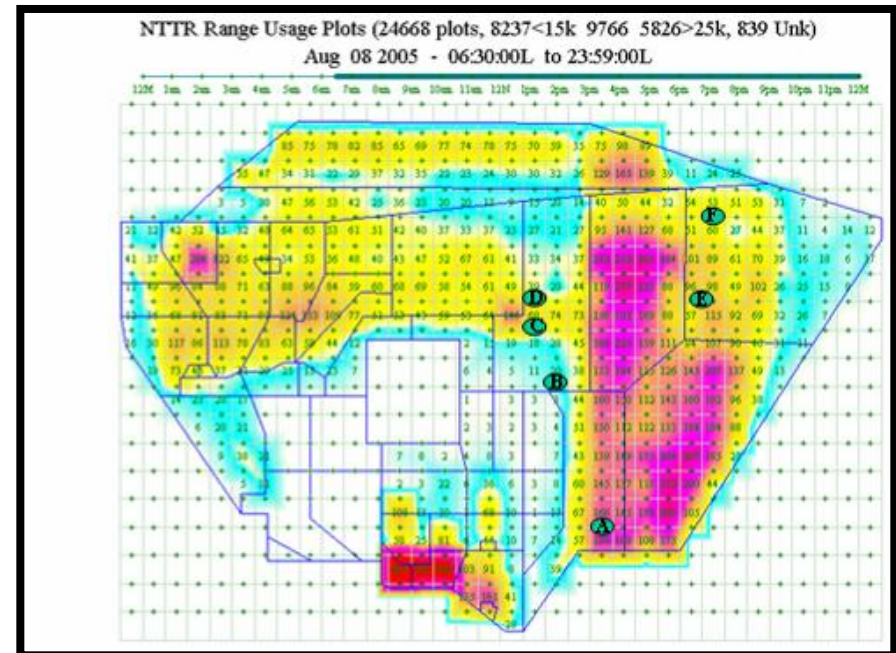


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Range Pressures

- Growth across NV, including range and training routes
 - Heavy flight ops (200/day)
 - Aircraft 100 ft above ground
 - Sonic booms/high noise
- Increase public awareness
 - Robust outreach program
 - Disclosures to residents
 - Developer mitigations



A-Coyote Springs

D-Hilo

B-Alamo

E-Caliente

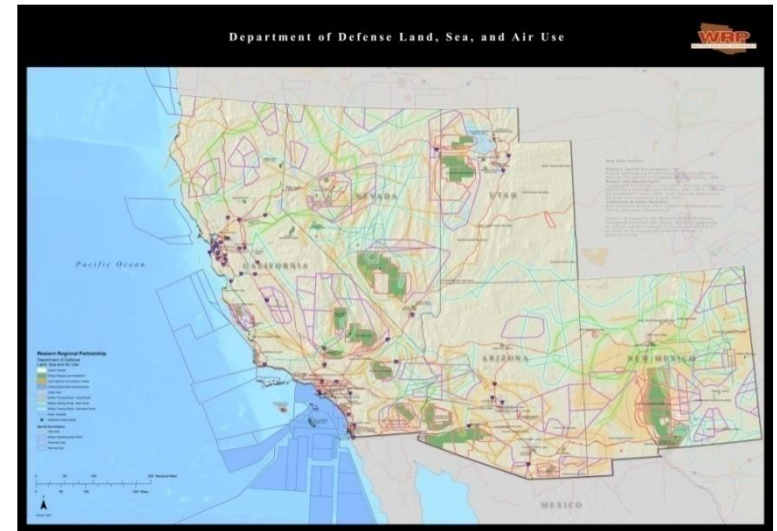
C-Crystal Springs

F-Pioche



Partnerships & Outreach

- **Nellis Partnering and Outreach**
 - Western Regional Partnership
 - DoD Wind/Solar Work Group
 - Range Sustainability Group
 - NV Joint Military Affairs Committee
 - Sen Reid's Blue Ribbon Energy Panel & Energy Transmission Grp
 - S. NV Regional Planning Coalition
 - Federal Lands Disposal Subcomm
 - Mohave Sustainability Council
 - Nellis Dunes Advisory Committee
 - Nevada Wind Working Group
 - NV Renewable Energy Access Advisory Committee

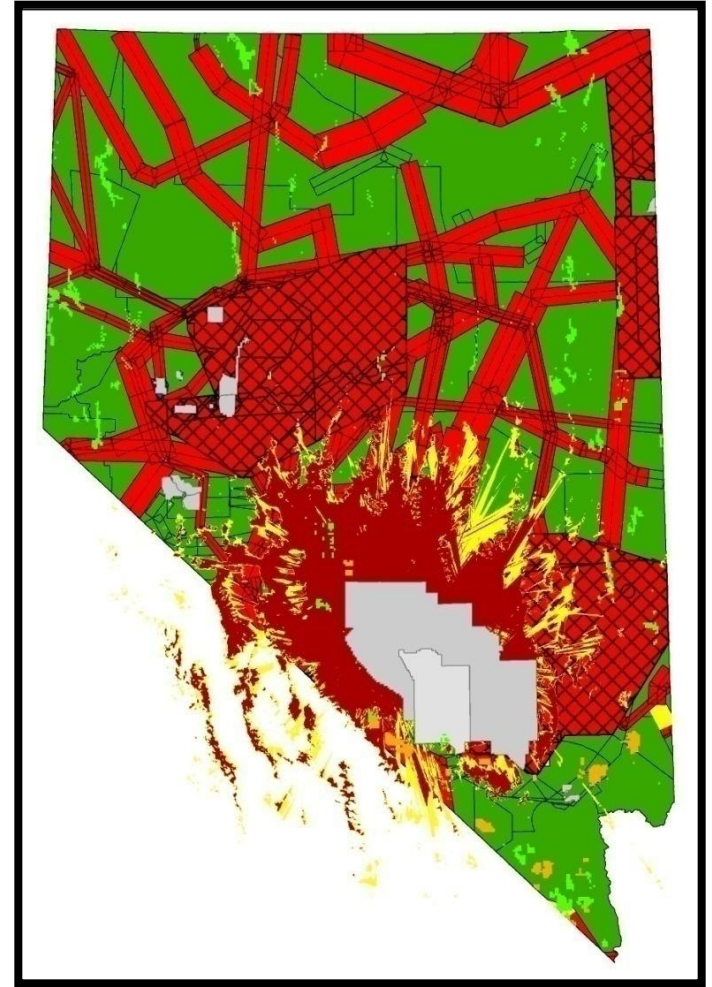


Western Regional Partnership



Renewable Energy Pressures

- 100+ proposals in NV already
 - Abundant energy resources
 - BLM land is very attractive
 - Clarification needed for projects on military withdrawn lands
- Mission impacts vary
 - Wind Energy: Height; radar
 - Solar Energy: Height; radar; glare; noise/boom damage; heat
 - Geothermal: Unknown
 - New Energy Corridors: Height



Yellow/Solar; Green/Wind



Renewable Energy Potential Impacts

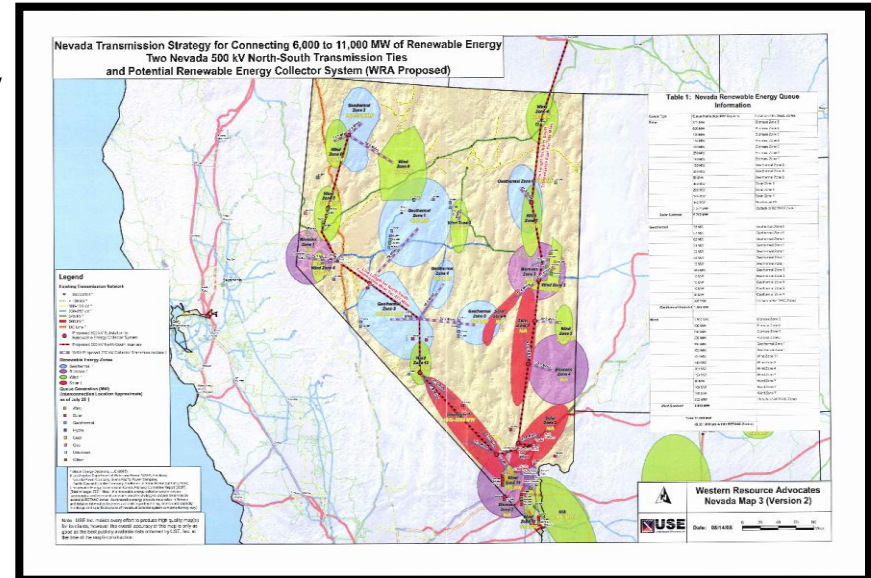


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Leaning Forward on Energy

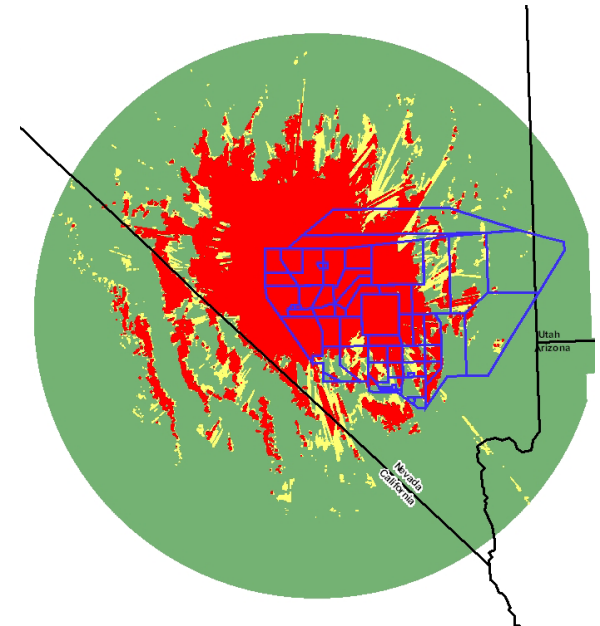
- **Synergistic: Beyond Compatible**
 - Find win-win areas by commodity
 - Incentivize compatible projects
- **Proactive outreach may prevent incompatible development**
 - Identify impacts at early stages
 - Valid analysis key to credibility
 - Technology testing key
 - AF Studies recently funded





Energy Studies

- Requested study to quantify renewable energy project/transmission impacts
 - Radar Cross Section (RCS) analysis
 - Doppler analysis of spectral line development if structure has external moving parts
 - Thermal boundary layer analysis if technology generates heat
 - DoD impacts on solar in supersonic airspace
 - Impact of solar developments on DoD, such as glare, heat damage, light pollution, etc.
 - Transmission spider web creates new “floor”
 - AF study; \$1M funded for from stimulus
- Multiple other studies also in progress



RCS Impact Areas



Contacts

■ Nellis Air Force Base:

- Ms. Deborah MacNeill, Director of Public Partnerships
- (702) 652-7777 or deborah.macneill@nellis.af.mil

■ Naval Air Station Fallon:

- Mr. Zip Upham, Public Affairs Officer
- (775) 426-2880 or zip.upham@navy.mil

■ DoD Southwest Renewable Energy Working Group:

- Mr. Tony Parisi, Head, Sustainable Ranges
- (805) 989-9209 or anthony.parisi@navy.mil



Summary/Key Messages

- **National Treasure threatened by incompatible development**
 - Compatible growth keeps public safe & protects mission
 - There is no “one size fits all” answer for compatibility
- **Early notification and involvement are keys to success in finding win-win solutions**
 - Team Nellis aggressively pursuing data/analysis to promote compatible renewable energy initiatives
- **Balance of national security interests – energy independence and military readiness**
- **Nellis AFB is a proponent of compatible renewable energy initiatives both on and off DoD lands**
 - DoD is a stakeholder, not an approving authority, for non-DoD lands

Nellis Air Force Base

A photograph of a row of fighter jets on a tarmac at dusk. The jets are silhouetted against the orange and yellow sky. In the background, the Las Vegas skyline is visible, including the Stratosphere tower. Several tall light poles are positioned between the jets and the city.

Questions?